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ONLINE TEACHING MODULE IN COMPUTER NETWORKING OF NAVAL STATE UNIVERSITY, NAVAL, BILIRAN PROVINCE, PHILIPPINES

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ABSTRACT

Nowadays, technologies provide different ways to make easier and faster. There are different types of systems provided and created for establishments, industries, corporations, companies. Some of the technologies are the online system, the automated system and many more. This enables the users to minimize their time, money and effort in personal and business transactions. Automation plays an increasingly important role in the global economy and daily experience. By developing innovative software and previously unavailable hardware devices, business system establishes a strong record for creative solution that is both effective and patentable. In this case, the proponents would like to design an e-learning in a form of modular object-oriented learning environment.

Course Management System such as is being used by different universities to deliver knowledge to each student through the use of e-learning or virtual learning environment to allow instructors to manage their courses and exchange information with students for a course. (Modular Object-Oriented Dynamic Learning Environment) is a software package for producing internet-based courses and websites. It is a global development project designed to support a social constructionist framework of education.

Content Management System or Learning Management System is a software application for the documentation, tracking, and reporting of training programs, classroom and online events, e-learning programs, and training content. The system is designed to run in the background of public website. It allows administrators to edit content through an administrator panel that is then shown and displayed on the public frontend of the website. Often there are several levels of users who have control over the internet on the website, these can be the super admin. Using special access to the system through the web browser creators and editors can manage documents within the CMS. Overall the content management system controls and allows admin to manage workflows and other processes.

Online education plays a vital role providing quality instructions particularly to the students. A type of Content Management System will help the students and the faculty in the new trend of instruction. This system will answer the need in accessing relevant information in an easy and immediate way. Moreover, students will be updated on the status of every subject that they have enrolled. Thus, its accessibility allows the students to save time for they can easily retrieve results using the system. It will help the university to be one of the State Colleges and Universities adopting the different technology as a service to the clients especially for the students enrolled in the institution. It can be convenient for a students to engage on the online education process from the comfort of their homes or internet cafe, at their most favorable and convenient time. The system will enhance the teaching strategies of the teachers in an easy way using the internet.

The core of this proposal emphasizes on achieving program clarity by using the different ways of techniques, structures, methods, diagrams, procedures models and system design that will surely help both teachers and students of the Naval State University specifically in the College of Industrial, Information and Communication Technology to provide an access on virtual learning environment or e-learning.

INTRODUCTION
OBJECTIVES OF THE STUDY

To design and develop an effective virtual learning environment or e-learning for the College of Industrial, Information and Communication Technology of Naval State University and to measure the acceptability of the faculty and students of the said technology.

Specific Objective:
1. To have an online access of the different subjects where the students are enrolled.
2. To have an easy retrieval of information for every course or subject.
3. To provide a fast result of the different assessment and evaluation (quizzes, examination, assignment and others etc.).
4. To provide an accurate reports base on the performance of student.

SIGNIFICANCE OF THE STUDY

The proposed system will benefit the following:

The School

The virtual learning environment or e-learning will cater for the betterment of the school in terms of computer aided instruction. It will help the school to cater the needs of its clients and extend quality education and service.

Faculty

The teacher can assign readings and homework problems, and base lectures on the material within the text. However, the e-learning guide is also ideally suited for **asynchronous online courses**. Such courses are particularly appealing to students who commute to school or have difficulty scheduling classes due to course time conflicts.

Students

The students will benefit by having an online access for the different subjects offered, by program and learn through online and also This e-learning guide can be used also as the textbook for a course on computer networking just like any other textbook.

Proponent

The proponent is also a beneficiary of the study since it will help to enhance the skills and work performance while grasping additional knowledge throughout the study.

Future Researchers

The study could also be used as a reference for further study in online education or e-learning for those researchers who want(s) to have and in depth study of enhancing the system.

SCOPE AND DELIMITATION OF THE STUDY

The proposed design of course management system conducted in the College of Industrial, Information and Communication Technology of Naval State University. The subject of the study will be the first year, second year, third year and fourth year student and the faculty members teaching Information Technology major subjects in Bachelor of Science in Computer Science. The design will use , a type of Learning Content Management System (LCMS) used for Online Education or E-Learning.

The system includes the following:
1. Different account of students currently enrolled the subject.
2. Courses offered.
3. Topics or course outline.
4. Reports of the different results of the students for every course.

Project Design
Project Description
Technology Used - as a type of Content Management System (CMs) uses the following technology:
PHP - **Hypertext Preprocessor** (a recursive acronym, originally *personal home page*) is a widely-used general-purpose scripting language that is especially suited for Web development and can be embedded into HTML.
It is designed for web development to produce dynamic web pages. For this purpose, PHP code is embedded into the HTML source document and interpreted by a web server with a PHP processor module, which generates the web page document. As a general-purpose programming language, PHP code is processed by an interpreter application in

command-line mode performing desired operating system operations and producing program output on its standard output channel. It may also function as a graphical application. PHP is available as a processor for most modern web servers and as a standalone interpreter on most operating systems and computing platforms.

MySQL - is a relational database management system (RDBMS) that runs as a server providing multi-user access to a number of databases. The SQL phrase stands for Structured Query Language. The MySQL development project has made its source code available under the terms of the GNU General Public License, as well as under a variety of proprietary agreements. MySQL was owned and sponsored by a single for-profit firm, the Swedish company MySQL AB, now owned by Oracle Corporation. Free-software projects that require a full-featured database management system often use MySQL. For commercial use, several paid editions are available, and offer additional functionality. Apache - The **Apache HTTP Server**, commonly referred to as **Apache,** is web server software notable for playing a key role in the initial growth of the World Wide Web.[2] In 2009 it became the first web server software to surpass the 100 million web site milestone.[3] Apache was the first viable alternative to the Netscape Communications Corporation web server (currently known as Oracle iPlanet Web Server), and has since evolved to rival other Unix-based web servers in terms of functionality and performance. The majority of web servers using Apache run a Unix-like operating system.

Apache is developed and maintained by an open community of developers under the auspices of the Apache Software Foundation. The application is available for a wide variety of operating systems, including Unix, GNU, FreeBSD, Linux, Solaris, Novell NetWare, AmigaOS, Mac OS X, Microsoft Windows, OS/2, TPF, and eComStation. Released under the Apache License, Apache is characterized as open-source software.

System Features and Functionalities (including security features) *Overall Design*

- Promotes a social constructionist pedagogy (collaboration, activities, critical reflection, etc)
- Suitable for 100% online classes as well as supplementing face-to-face learning
- Simple, lightweight, efficient, compatible, low-tech browser interface
- Easy to install on almost any platform that supports PHP. Requires only one database (and can share it).
- Full database abstraction supports all major brands of database (except for initial table definition)
- Course listing shows descriptions for every course on the server, including accessibility to guests.
- Courses can be categorized and searched - one site can support thousands of courses
- Emphasis on strong security throughout. Forms are all checked, data validated, cookies encrypted etc
- Most text entry areas (resources, forum postings etc) can be edited using an embedded WYSIWYG HTML editor

Site management

- Site is managed by an administrator user
- Site is defined during setup. Defaults can be edited during setup or globally accepted
- Site can be modified by a robust Site administration block.
- Plug-in "themes" allow the administrator to customize the site colors, fonts, layout etc to suit local needs
- Plug-in activity modules can be added to existing installations
- Plug-in language packs allow full localization to any language. These can be edited using a built-in web-based editor. Currently there are language packs for over 70 languages.
- The code is clearly-written PHP under a GPL license - easy to modify to suit your needs.

 User management

- Goals are to reduce admin involvement to a minimum, while retaining high security

- Supports a range of user authentication mechanisms through plugin authentication modules, allowing easy integration with existing systems.
  - Standard email method: students can create their own login accounts. Email addresses are verified by confirmation.
- Students are encouraged to build an online Edit profile including photos, description. Email addresses can be protected from display if required.
  - Every user can specify their own timezone, and every date in is translated to that timezone (e.g. posting dates, assignment due dates etc)
  - Every user can choose the language used for the interface (English, French, German, Spanish, Portuguese etc)

Enrolment

- After a user has been authenticated by the site or allowed in as a guest, they can self-enroll in courses.
- Courses can a limit enrollment in several ways. Student self enrollment can be turned off.
- An "enrolment key" in a course, only allows certain students to enter. These keys can be give out face-to-face or via email and can be changed
- Teachers, with permissions, can manually enroll students or unenroll students in their courses.
- Course completion is a course prerequisite feature of 2.0 that allows scaffolding of courses.
- Course and site settings have options for automatic removal of users.
- Each person needs only one account for the site. Each account can have access to different courses, and the courses resources and activities.
- Meta courses get their enrollment information from 1 or more other courses.

Roles

- Roles combine specific permissions for specific types of participants. A user can be assigned a different role for each contexts, such as a specific course.
- The administrator (admin) user account controls the creation of courses and creates teachers by assigning users to courses and giving them a role in that context
- New roles can be created, copied from existing roles and edited. Some standard roles include:
  - Course creator can create courses, teach in them, and assign others to teacher roles.
  - Teachers are a role in a specific course.
  - Non-editing teacher roles are available for adjuncts, and part-time tutors.
  - Students can participate and view activities but not create them.
  - Guests are view only users.

Course management

- Typically, a teacher has full control over all settings for a course.
  - This can include assigning other teachers roles with less privileges.
- Choice of Course formats settings such as by week, by topic or a discussion-focused social format.
- An individual course theme and layout can be created for any course.
- Flexible array of course activities - Forums, Quizzes, Glossaries, Resources, Choices, Surveys, Assignments, Chats, Workshops.
- Groups - teacher(s) and students can be placed in one or more groups.
- Recent changes to the course since the last login can be displayed on the course home page - helps give sense of community.
- Content areas (things seen by students) have an HTML editor tool bar with many standard editing fuctions, including an html code view.
- Mail integration - copies of forum posts, teacher feedback etc can be mailed in HTML or plain text. Users can set a preference for daily emails in their profile.

- Custom scales - teachers can define their own scales to be used for grading forums and assignments.
- Courses can be packaged as a single zip file using the Backup function. These can be restored on any server.
- Specific course activities and resources can be imported from another existing course.
- Conditional activities in 2.0 allow the teacher to set completion standards and conditions for entry into any specific activity, based upon several criterion.

Course reports

- All grades for many kinds of activities can be viewed on one page (and downloaded in several formats).
- Graded activities can be further calculated or manually entered in the Gradebook which is separated from the initial activity calculations. Additionally categories of graded activities and display functions allow for custom reports.
- Full user logging and tracking - activity reports for each student are available with graphs and details about each module (last access, number of times read) as well as a detailed "story" of each student involvement including postings etc on one page.

Assignment Module

- Assignments can be specified with a due date and a maximum grade.
- Students can upload their assignments (any file format) to the server - they are date-stamped.
- Late assignments are allowed, but the amount of lateness is shown clearly to the teacher
- For each particular assignment, the whole class can be assessed (grade and comment) on one page in one form.
- Teacher feedback is appended to the assignment page for each student, and notification is mailed out.
- The teacher can choose to allow resubmission of assignments after grading (for re-grading)
- Allowing resubmissions can allow the teacher to progress monitor student projects/assignments as they evolve.
- Advanced assignments can allow multiple files to be uploaded. This could keep together preplanning maps, outlines, research papers and presentations. (Not for beginners)

Chat module

- The Chat module allows smooth, synchronous text interaction
  - They can be limited to group members or roles, or be for anyone in the course
- Includes profile pictures in the chat window
- Supports URLs, smilies, embedded HTML, images etc
- All sessions are logged for later viewing, and these can also be made available to students

Choice module

- The Choice module is like a single question poll. Can either be used to vote on something, or to get feedback from every student
- Teacher sees intuitive table view of who chose what
- Students can optionally be allowed to see an up-to-date graph of results

Forum Module

- Different types of forums are available, such as course news, open-to-all, one-thread-per-user and question/answers types.
- Forum posts can be emailed in several ways, some controled by the student.
- Posts can have the authors photo attached.
- Discussions can be viewed nested, flat or threaded, oldest or newest first.
- Robust subscription methods for each forum
  - Individual forums can be subscribed to by each person
  - Teacher can force subscription for all members of the course, either initially or permanently.

- Groups features allow options for more entry and viewing limitations for students.
- The teacher can choose not to allow replies to their posts (announcements).
- Discussion threads can be moved between forums or split by the teacher.
- Attachments can be made to posts and shown as part of message.
- Forum ratings can be used. These can be restricted to a range of dates and included as part of a student's grade.

Glossary Module

- The Glossary module is one of the modules that best illustrates the way that can fundamentally improve upon the experience of a traditional classroom
- When students contribute to a course in a public place like the glossary, their ideas are given weight and attention and often result in a greater pride or ownership of the assignment
- Allows participants to create and maintain a list of definitions, like a dictionary
- Student entries can be previewed by instructors before publishing
- Entries can be searched or browsed using alphabet, category, date, and author
- A glossary of terms can be easily referenced by students
- Almost any module of can be set to hyperlink - automatically - to any word or phrase that is stored in or added to the glossary
- Glossary items can be grouped in categories
- Participants can comment on glossary entries
- Entries can be rated using teacher-defined scales
- Glossaries can be easily exported and imported via xml
- Glossaries can be fully searched
- Glossaries can be viewed with different display formats

Lesson Module

- A lesson is a single activity where a series of pages are presented to the student, usually based upon a student's choice.
- Content seen by the student is created with 's HTML editor tool.
- Students make choices by their answers to questions or by selecting a button with a description. Their choices are linked to other pages in the lesson.
  - This allows for a simple slide show type of presentation, with content and questions.
  - It allows for a branching, adaptive presentation based upon a student's specific choice.
  - Navigation through the lesson can be straight forward or complex, logical or random.
- Jumps are associated with each choice that link to other lesson pages.
  - Jumps can be to a specific page or to a random page or a page not seen by the student.
- Choices that are answers to questions and can be scored and given individual feedback.
  - Question pages include Multiple choice, Multi-answer, T/F, numeric, short answer and essay.
- Lesson settings offer the teacher many options such as:
  - Different scoring and grading potentials
  - Lessons can build upon each other through conditional dependencies upon one another
  - Student attempts, time limits, minimum score and retakes can be set for each lesson
  - Students may see progress bars, running score, and feedback on their answers.
  - Password, start and end times, and other restrictions can be placed on students.

- Pages can be created one at a time or imported.
Quiz Module
- There are many types of standard questions formats that can be used in the Quiz module. Quiz offers many scoring methods and ways to present itself to students.
- Quizzes are automatically graded when a student finishes. An entire quiz or specific questions be regraded at any time, should the teacher change an answer's score.
- There are many quiz settings options, such as:
  o Quizzes can have a limited time window outside of which they are not available
  o At the teacher's option, quizzes can be attempted multiple times, and can show feedback and/or correct answers
  o Quiz questions and quiz answers can each be shuffled (randomised) to reduce cheating
  o Quizzes can be attempted multiple times, if desired
  o Attempts can be cumulative, if desired, and finished over several sessions
- Questions are stored in categories that are part of a robust [[Question bank|database] for easy access.
  o Categories of questions can be arranged in the database so they can only be used in a specific quiz, or in a specific course or in any quiz on the site.
  o Edited questions can replace the orignial or become new questions in the database
- Questions use HTML formatting, images and has a friendly tool bar in both the question and answer areas.
- Questions can be imported or exported in many file formats.
- There are more than 10 question types, each with different scoring methods, such as:
  o Multiple-choice questions supporting single or multiple answers
  o Short Answer questions (words or phrases)
  o True-False questions** Matching questions
  o Random Short answer questions
  o Numerical questions (with allowable ranges)
  o Embedded-answer questions (cloze style) with answers within passages of text
  o Embedded descriptive text and graphics is possible in questions
- Quiz questions can come from specific question in a specific category or as a random questions drawn from a category. These can be mixed and matched to suit the teacher.
Resource Module
- Resources can display of many types of media content files by a single link on the course page, such as:
  o Word, Powerpoint, Flash, Video formats, Audio formats
  o Internal web pages (HTML formatted) can be created with HTML editor tool
  o Internal Text pages (no formatting)
  o Files can be stored locally or the link point to remote locations
- Files can be uploaded and managed (zipped, unzipped, renamed, moved) in the course
  o Folders can be created and managed in the course and students given a link to the folder via a resource link.
  o File handling in 2.0 has a File picker that is associated with specific resources or activities, allowing uploads from server, private, recent or on the fly. Files have attributes for author and license/copyright.
- Content on the web can be linked to or seamlessly included within the course interface.
  o External web applications can be linked to with data passed to them
Survey Module
- Built-in surveys (COLLES, ATTLS) have been proven as instruments for analysing online classes
- Online survey reports always available, including many graphs. Data is downloadable as an Excel spreadsheet or CSV text file.

- Survey interface prevents partly-finished surveys.
- Feedback is provided to the student of their results compared to the class averages

Wiki Module

- Wiki module is a series of web pages that anyone can add to or edit
- It enables document pages to be authored collectively
- Supports groups
- There are many teacher based editing tools.

Workshop Module

- Workshop module allows peer assessement of documents, and the teacher can manage and grade the assessment.
- Supports a wide range of possible grading scales
- Teacher can provide sample documents for students to practice grading
- Being redone for 2.0

System Requirements

is primarily developed in Linux using Apache, MySQL and PHP (also sometimes known as the LAMP platform). It is also regularly tested with Windows XP/2000/2003 (WAMP), Solaris 10 (Sparc and x64), Mac OS X and Netware 6 operating systems. Support for PostgreSQL, Oracle and Microsoft SQL Server is also available.
The requirements for are as follows:
Hardware

- Disk space: 160MB free (min). You will require more free space to store your teaching materials.
- Memory: 256MB (min), 1GB (recommended). The general rule of thumb is that can support 50 *concurrent* users for every 1GB of RAM, but this will vary depending on your specific hardware and software combination.
  o This includes hosting limits of PHP or MySQL on a hosting service.
  o The capacity can limit the number of users your site can handle. See User site capacities

Software

Requires a web server environment and will run in Apache and IIS easily. should run in any server environment that supports PHP.

Is written in the PHP scripting language. Currently, v 1.9.x requires a minimum of PHP v4.3.0 to run. 2.0 needs PHP v 5.2.8. There have been some issues with deprecated tags in PHP v 5.3.0 which have a negative impact on a number of PHP Apps, not exempted, so please ensure your PHP version is later than v 5.3.2 if using a v5.3.x. There has also been reported some issues installing with PHP-Accelerator. See the PHP version requirements here PHP settings by version for more information. There are some real issues in the interoperability interface of different databases, which complicates the whole issue. For version information, you can go to the Download page and that will describe version requirements for available packages.

System Implementation
Server installation
There are two ways to get , either as a compressed package from http://download..org/ or via CVS. After downloading and unpacking the archive, or checking out the files via CVS, you will be left with a directory called "", containing a number of files and folders. For the standard package, you can either place the whole folder in your web server documents directory, in which case the site will be located at http://yourwebserver.com/, or you can copy all the contents straight into the main web server documents directory, in which case the site will be simply http://yourwebserver.com.
Setting-up your web server
You need to create a blank database for to use and finally create a directory on your hard disk for to save your materials and other files you upload into your courses before you can start the installation process.

Create empty database
You need to create an empty database (eg "") in your database system along with a special user (for example "user")
that has access to that database (and that database only). You could use the "root" user if you wanted to for a test
server, but this is not recommended for a production system:

Create the data directory
will also need some space on your server's hard disk to store uploaded files, such as course documents and user
pictures. The installer tries hard to create the data directory for you but if it fails then you will have to create a directory
for this purpose manually.

Start install
 There are two basic ways to install : Most rs are used to the installer script but with 2.0 you may install it from the
command line.

Install with installer script
To run the installer script (install.php), just try to access your main URL using a web browser, or access
http://yourserver/install.php directly. (The Installer will try to set a session cookie. If you get a popup warning in your
browser make sure you accept that cookie!). At the end of the process will try and write the file into the right location,
otherwise you can press a button to download it from the installer and then upload config.php into the main directory
on the server. Along the way the installer will test your server environment and give you suggestions about how to fix
any problems. For most common issues these suggestions should be sufficient, but if you get stuck, check in the
Installation Forum for more help.

Go to the admin page to continue configuration
Once the basic config.php has been correctly created in the previous step, trying to access the front page of your site
will take you to the "admin" page for the rest of the configuration.

The first time you access this admin page, you will be presented with a GPL "shrink wrap" agreement with which you
must agree before you can continue with the setup.

Now will start setting up your database and creating tables to store data. First, the main database tables are created.
You should see a number of SQL statements followed by status messages. You should see SUCCESS next to each
one until you see "Main databases set up successfully."

Tip: If you don't see these, then there must have been some problem with the database or the configuration settings
you defined in config.php. Please see Install with installer script for more details and issues.

Scroll down the very bottom of the page and press the "Continue" link.
You should now see a form where you can define more configuration variables for your installation, such as the default
language, SMTP hosts and so on. Don't worry too much about getting everything right just now - you can always
come back and edit these later on using the admin interface. The defaults are designed to be useful and secure for most
sites. Scroll down to the bottom and click "Save changes".

Next you will see more pages that print lots of status messages as they set up all the tables required by the various
module. As before, they should all be green.

Scroll down the very bottom of the page and press the "Continue" link.

The next page is a form where you can define parameters for your site and the front page, such as the name, format,
description and so on. Fill this out (you can always come back and change these later) and then press "Save changes".

Finally, you will then be asked to create a top-level administration user for future access to the admin pages. Fill out the details with your own name, email etc and then click "Save changes". Not all the fields are required, but if you miss any important fields you'll be re-prompted for them. You can change this information later via the User profile.

Make sure you remember the username and password you chose for the administration user account, as they will be necessary to access the administration page in future.

TIP: If for any reason your install is interrupted, or there is a system error of some kind that prevents you from logging in using the admin account, you can usually log in using the default username of "**admin**", with password "**admin**".)

Once successful, you will be sent to the home page of your new site! Please note the Site administration block on the left with links. These items are only visible to you because you are logged in as the admin user. All your further administration of can now be done using this block.

Installing using command line

Installing using command line is recommended only for experienced server administrators. Please note you have to execute the installation script as the same user used for apache. Command line installation is not compatible with Windows platforms.

            $cd /var/www/html//admin/cli
            More information about the options can be found using
            $sudo -u wwwrun /usr/bin/php install.php --help

- o **System Administration**
  Logon information – User name and password.

   Groups – A method for grouping individual users. You can manage users more easily by assigning them to groups. If you create groups, you can apply a role to the group, and this role is inherited by all the users in the group.

Roles – A defined collection of privileges.Roles are a collection of defined privileges that control individual user or group access to particular VMware Infrastructure objects. ESX Server and VirtualCenter Server provide a set of default roles. You can also create new roles.

Privileges – A particular right corresponding to a set of operations or methods on a class of objects.

Permissions – The combination of the role plus user or group name assigned to a VMware Infrastructure inventory object. The role and a user or group name make a pair. This pair is assigned to a VMware Infrastructure object. Typically, this role and user pairing is propagated to the children in the inventory hierarchy. The pair is called a *permission*.

- o **Operating Procedure**
  - ▪ **Admin User**
  - ▪ **Teachers**

The purpose of this page is to give an overview to a new user. You can find many links to other pages in the text which will give more technical details and "how to" ideas. For new users, we would like to point out the Documentation box on the left side of every page in Docs. The Teacher link brings up a welcome and a short list of key pages of interest to a teacher, including examples of use. A list of all teacher documentation articles can also be found under Category:Teacher link found at the bottom of most teacher pages.

- • We are assuming that your site administrator has set up a site, and assigned you to a new, blank course where you have teacher privileges.
- • You must be logged in in order to edit a course and use most of the features described below.

Basics

The course settings page offers the teacher many controls. These include who can come into the course, how the course is laid out and other potential functions. On some sites, the teacher's site administrator or course creator, may have rules/guidelines about some of these settings.

Most course homepage formats are broken into course sections (often by week or topic). Resources and activities are added to each section. When writing text in you have a range of Formatting options, including using HTML in . The Course settings are robust and offer different ways to enroll Students or format the course.

The illustration below shows a new course set up with topic sections in the middle column. In the right and left columns are a few of 's many blocks such as "Latest News" or "Administration". Editing has been turned on. The teacher is ready to add resources and activities.
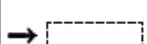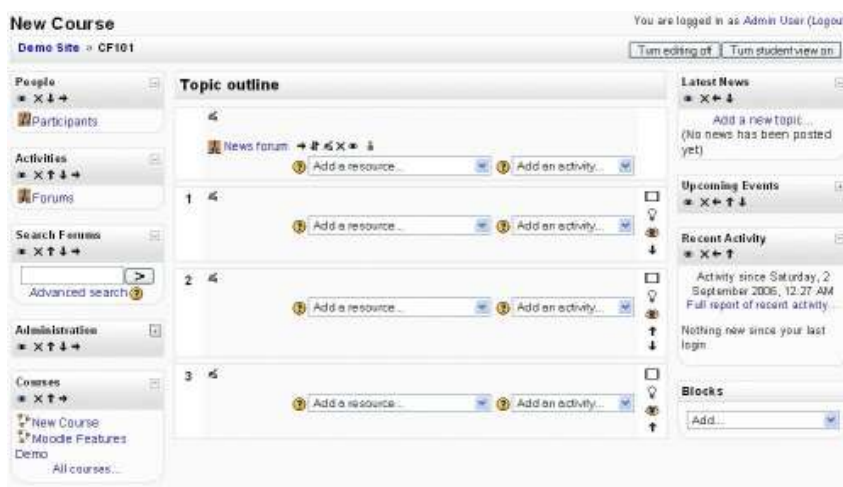

Example: Teacher's view of a home page of new course, editing turned on
Editing course section
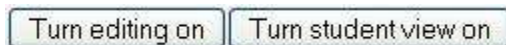
To add or alter activities or resources a teacher must use the "Turn editing on" button on the course homepage. The same button will also turn editing off. Similarly, the "Turn student view on" button allows the teacher to see the course page as a student would see it.

To add items to a section, you will use the pull down boxes for activities and resources.

When editing has been turned on, a variety of editing icons appear next to all editable objects in the course. Your icons may look different because of your Theme. Go here for details about each icon. Below is a brief list of common icons.

Icon	Effect	Icon	Effect	Icon	Effect	Icon	Effect
✎	Edit item	👁*	Close/Hide item	✕	Delete/Remove	⇕	Move (up/down)
☐☐*	See all weeks/topics	⌄*	Open/Show Item	→	Indent/shift right	→ [----]	Move here
☐*	See one week/topic	❓	Help			💡	Make Current (highlight) week/topic

TIP: Some icons toggle (*). For example, the open eye indicates that the resource is visible to students, while clicking it changes it to a closed eye, making it invisible to students.

Activity modules
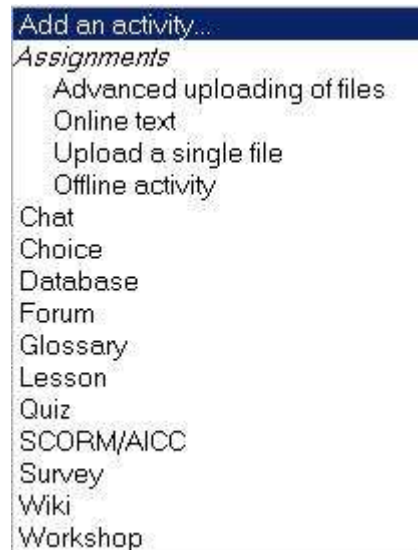
Add an activity drop-down menu - 1.8.2

There are a number of robust interactive learning activity modules that you may add to your course with the "Add an activity" drop down menu. If you wish, some or all of these activities can push information to a course gradebook.

Communication and collaboration may take place using live Chats or asynchronous discussion Forums for conversational activities. You can also use Choices to gain group feedback. Adding Wikis to your courses is an excellent way to allow students to work together on a collaboratively-authored project.

Work can be uploaded and submitted by students and scored by teachers using Assignments or Workshops. These modules have several assessment options, including instructor-assessment, self-assessment, and even peer-assessment. Online Quizzes offer several options for automatic and manual scoring. You can even integrate your Hot Potato quizzes by adding a Hotpot activity.

Lessons and SCORM activities deliver content and offer ways of individualizing your presentation based upon a student's choices. Glossaries of keywords can be set up by the instructor, and can be configured to allow students to edit, add, or rate entries.

Surveys and Databases are also very powerful additions to any course.

If all of that isn't enough for you then you can also add any number of contributed modules that are not part of the official release!
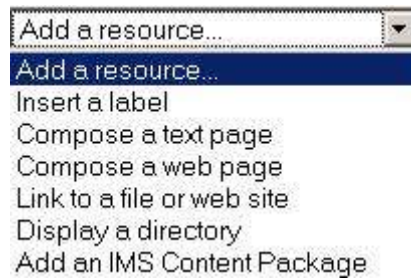
Resources

Add a resource drop-down menu supports a range of different resource types that allow you to include almost any kind of digital content into your courses. These can be added by using the add a resource dropdown box when editing is turned on.

A Text page is a simple page written using plain text from a link in the course. Text pages aren't pretty, but they're a good place to put some information or instructions. If you are after more options for your new page then you should be thinking about adding a Web page and making use of 's WYSIWYG editor.

Of course the resource may already exist in electronic form so you may want to link to an uploaded file or external website or simply display the complete contents of a directory in your course files and let your students pick the file themselves. If you have an IMS content package then this can be easily added to your course.

Labels allow you to add more information between activity or resource links in your course.

Add Block drop-down menu

Administration

- Turn editing on
- Settings
- Assign roles
- Grades
- Outcomes
- Backup
- Restore
- Import
- Reset
- Reports
- Questions
- Files
- Profile

Teacher's Course Administration block

Blocks seen by students
Each course homepage generally contains blocks on the left and right with the centre column containing the course content. Blocks may be added, hidden, deleted, and moved up, down and left/right when editing is turned on. Examples of blocks can be seen in the Getting Started image above. "Latest News", "Blogs", "Upcoming Events", and "Recent Activity" are a few examples.

A wide range of over 16 different block types can provide additional information or functionality to the learner by the teacher. The standard blocks that come with are shown on the right. There are also many contributed developed by rs that an administrator can add to this list.

Course administration block
A teacher with editing rights will also have a course administration block. This is an important tool for a teacher. It has sub menus for course: backup, restore, Assign roles, grades, activity logs/reports, Files and the useful Course settings.

A student's course administration block typically lists only Grades and Profile options.

General advice
- Subscribe yourself to all of the forums in your course so that you can keep in touch with your class activity.
- Encourage all of the students to fill out their user profile (including photos) and read them all - this will help provide some context to their later writings and help you to respond in ways that are tailored to their own needs.
- Use the Logs link (under Administration) to get access to complete, raw logs. In there you'll see a link to a popup window that updates every sixty seconds and shows the last hour of activity. This is useful to keep open on your desktop all day so you can feel in touch with what's going on in the course.
- Use many reports. Reports in the Administration block, Activity Reports (next to each name in the list of all people, or from any user profile page). These provide a great way to see what any particular person has been up to in the course.
- Respond quickly to students. Don't leave it for later - do it right away. Not only is it easy to become overwhelmed with the volume that can be generated, but it's a crucial part of building and maintaining a community feel in your course.
- Don't be afraid to experiment: feel free to poke around and change things. It's hard to break anything in a course, and even if you do it's usually easy to fix it.

- Use the navigation bar at the top of each page - this should help remind you where you are and prevent getting lost.
    - **Students**

A student is a Site participant who is enroled in a course. We will use the default term, but this participant role may be given another name in the course settings such as "Trainee". Major changes in both the course administration block and in role functionality took place in 1.7.

COURSE ENROLMENT ADMINISTRATION

The Assign roles link, in course administration block, allows teachers to manually enrol and/or unenrol students independently of the global enrolment method. This can allow you, the teacher, to manually control your enrolments or to fine tune enrolments linked to external systems (e.g. MIS).

Manual enroll

You will see two fields separated by two arrows (left/right). The left field lists enrolled students to your course and the right one contains the names of all potential students (i.e. students that the system already has registered). If the course is a metacourse then the page changes from listing/searching for students, to listing/searching for courses.

To add a student to the course, find their name in the field on the right, highlight it and click on the left-facing arrow, which will transfer the student to the left field (you can also type in the student's name in the "Search" field if there are too many students to list).

Manual unenrol

To unenrol a student from your course, you should repeat the above procedure but this time transferring the student from the left field to the right one (using the right-facing arrow). The student should move from the "Enrolled students" column to the "Potential students" column.

Automatic student enrolments

If internal enrolments are allowed (i.e. students can self-enroll) you will find a note saying that students themselves can enroll to your course. If you have set an enrolment key then giving them the enrolment key might spare you ever checking this page. Still, you can enroll/unenroll students manually without giving them the enrolment key.

- Guests

Has a built-in "Guest account". Visitors can log in as guests using the "Login as a guest" button on the login screen and enter any courses which allow guest access. In addition, logged-in users can enter any courses which allow guest access without being required to enrol. Guests ALWAYS have "read-only" access - meaning they can't leave any posts or otherwise mess up the course for real students.
They *cannot*:

1. Post in forums
2. Edit wiki pages
3. Participate in a chat
4. Take quizzes
5. Submit assignments
6. Add glossary or database activity entries or comments
7. Receive any scores or grades (because of the read-only access)

This feature can be handy when you want to let a colleague in to look around at your work, or to let students see a course before they have decided to enrol.

Note that you have a choice between two types of guest access: with an enrolment key or without. If you choose to allow guests who have the key, then the guest will need to provide the current enrolment key EVERY TIME they log in (unlike students who only need to do it once). This lets you restrict which guests can get into a course. If you choose to allow guests to enter without a key, then anyone can get into your course.

If you want guests to be able to take quizzes, or any of the other activities listed above, and have considered the security implications, you can create a visitor account, say with username = password = visitor, for everyone to share.
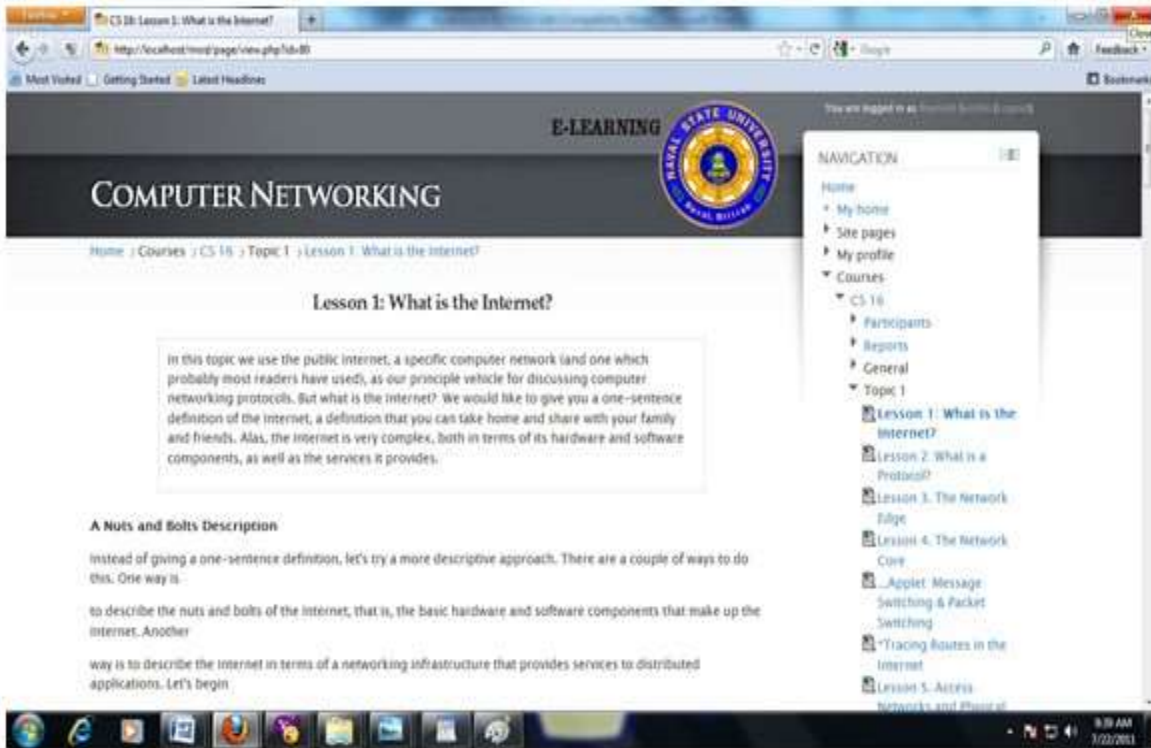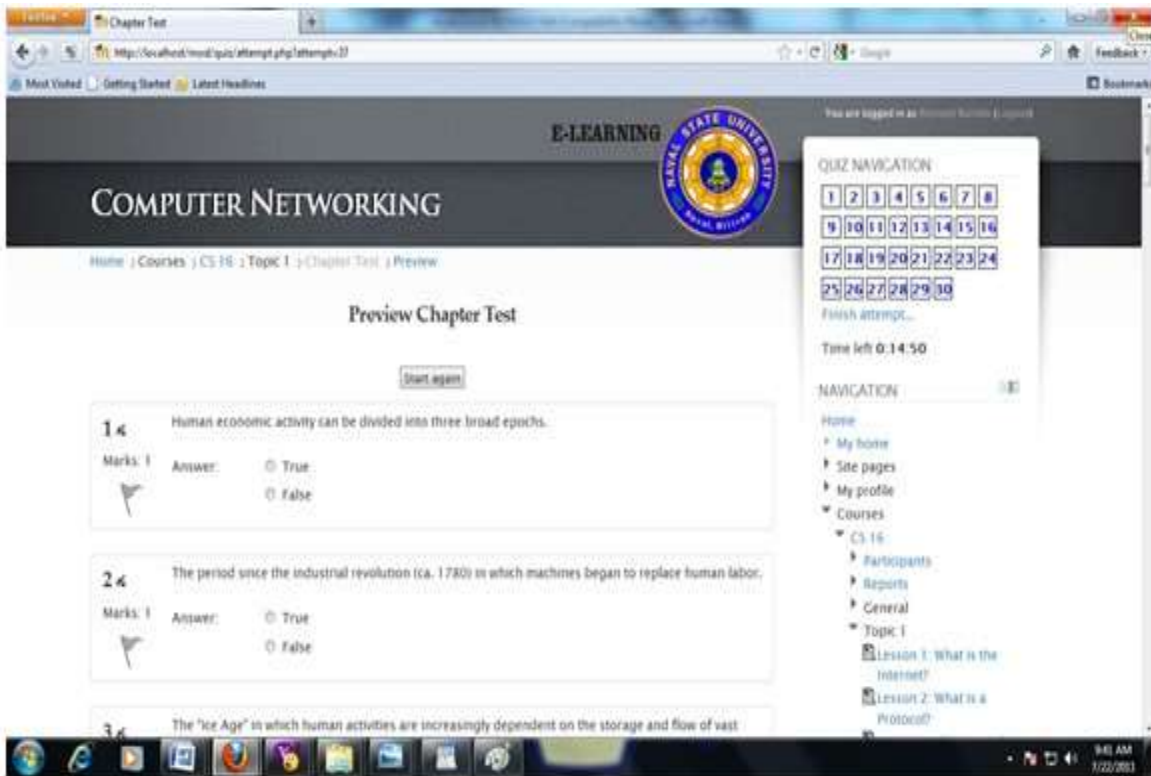
SCREEN DESIGNS
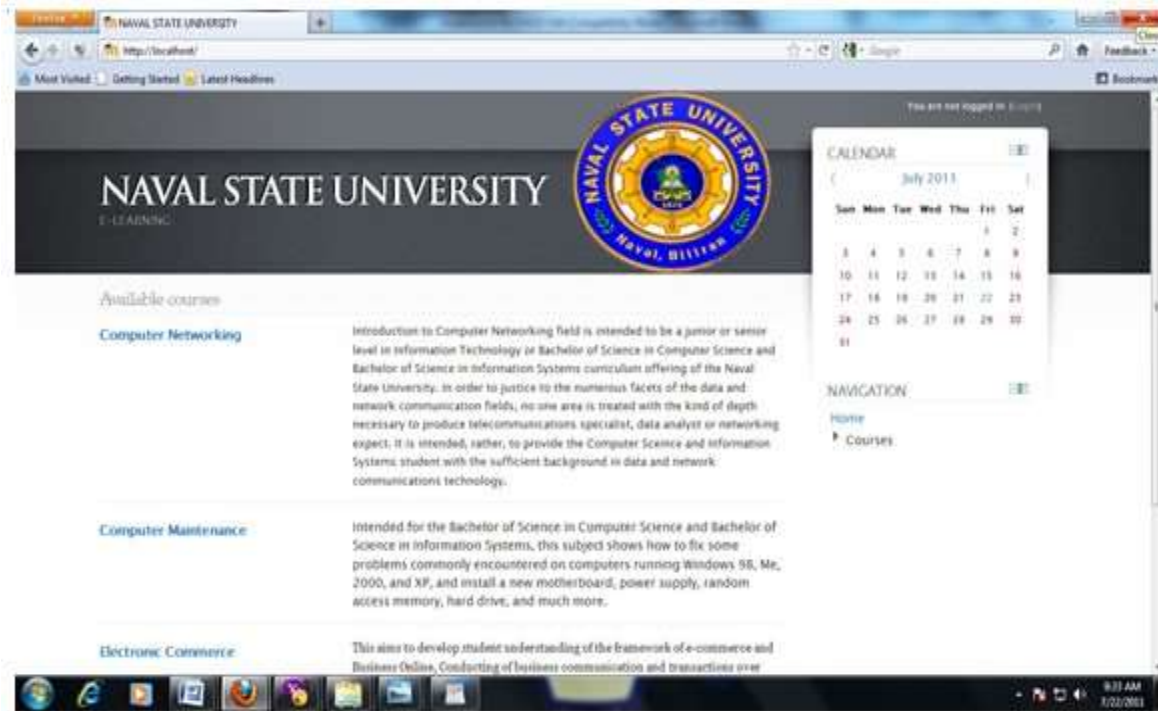
Main Page
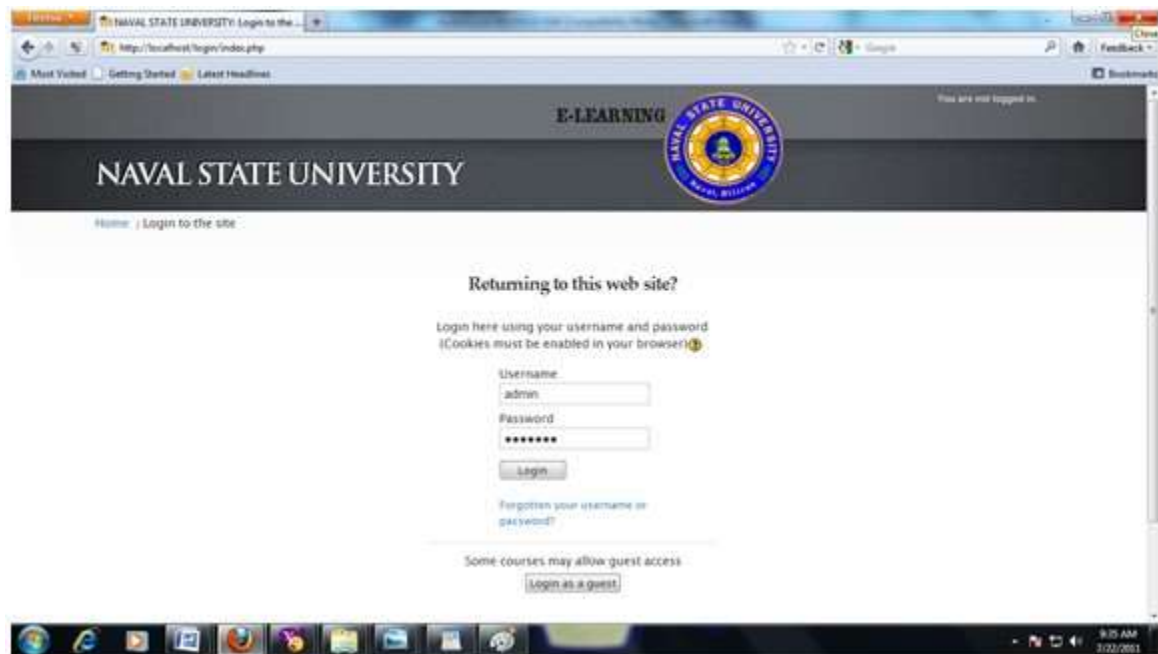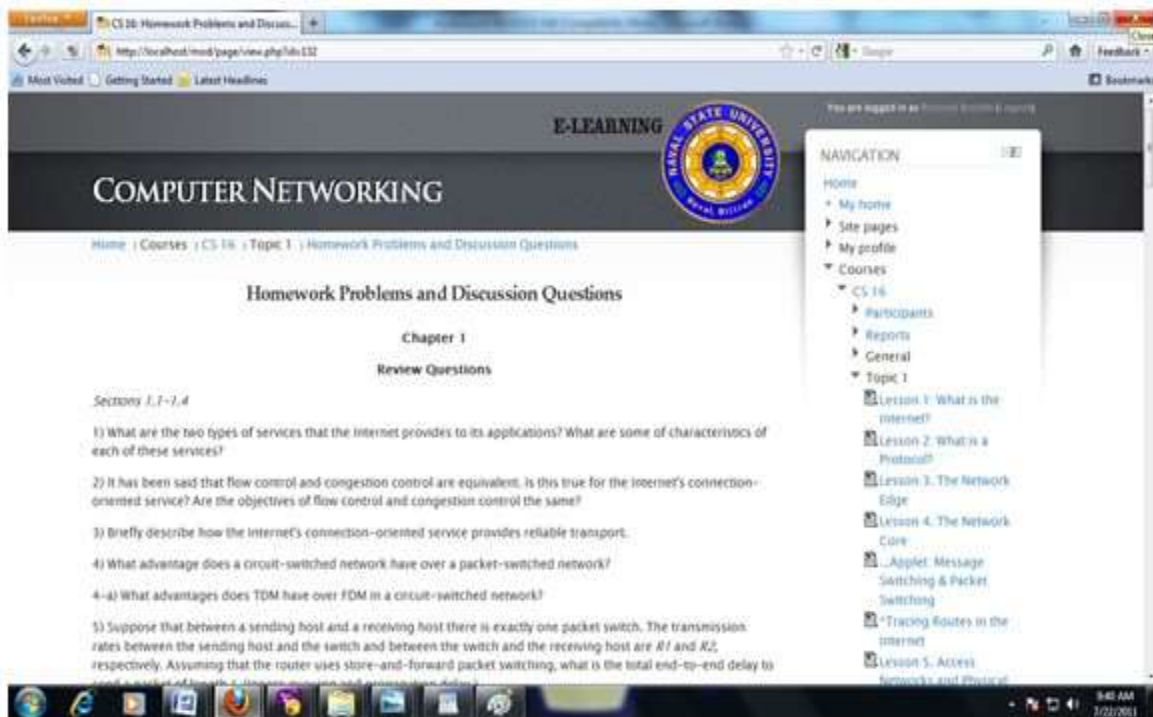

Login Page

Available Courses

Topic Course OutLine

Lesson

Chapter Test

Editing Quiz

Assignment

Assign Roles

Grades

Personal Profile Admin User

Definition of Terms
Definition of Terms
The following are the different terms used in this study with their corresponding definitions.

Naval State University. The term refers to a newly converted College from Naval Institute of Technology to a Naval State University.

Apache.- An open source web server program commonly used with PHP and MySQL in developing web applications.
PHP - Hypertext Preprocessor, also stands for *Personal Home Page* is a scripting language and interpreter primarily used on web servers.
MySQL. - A relational database management system (RDBMS) based on SQL (Structured Query Language).
Administrator - a person responsible for running technically the system.
Course Management System - content management software that is built for academic purposes. A Course Management System is used to serve as a web portal to online classes.
Courseware - is the name of the subject or lesson that student will be enrolling or currently enrolled.
E-Learning - it is to referred as online learning or virtual learning is a modern approach of delivering classes through the use of computers and the internet.
Guest - visitor with the lowest access level.
Instructor - handles the course / subjects.
Log In - the act of authenticating a user or student trying to access the content of the learning site.
MOODLE - *Modular Object-Oriented Dynamic Learning Environment* **-** is a free and open-source e-learning software platform, also known as a Course Management System, Learning Management System, or Virtual Learning Environment. It has a significant user base with 49,256 registered sites with 28,177,443 users in 2,571,855 courses (as of February, 2009)
Password - a password is a form of secret authentication data that is used to control access to a resource.
Server - the host or the remote workstations dedicated in handling the online learning system.
Student - can view the lessons and participate in activities such as quizzes.
System - a combination of components designed to process and store data.
User - user in a computing context refers to one who uses a computer system.

Username - is a term originally used to identify a person in a system.

XAMPP - an open source Apache, MySQL and PHP server developed by ApacheFriends.

Website - a website (alternatively, Web site or web site) is a collection of Web pages, images, videos and other digital assets that is hosted on one or several Web server(s), usually accessible via the Internet, cell phone or a LAN.

Web page - a Web page or webpage is a resource of information that is suitable for the World Wide Web and can be accessed through a web browser. This information is usually in HTML or XHTML format, and may provide navigation to other web pages via hypertext links.